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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,887	07/09/2003	So Hyun Park	SI-0036	8952
34610	7590	12/12/2006	EXAMINER	
FLESHNER & KIM, LLP			DOAN, KIET M	
P.O. BOX 221200			ART UNIT	
CHANTILLY, VA 20153			PAPER NUMBER	

2617

DATE MAILED: 12/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/614,887	PARK, SO HYUN	
	Examiner	Art Unit	
	Kiet Doan	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

1. **Claims 1, 12** are rejected under 35 U.S.C. 102(e) as being anticipated by Palviainen et al. (Patent No. 6,385,446).

Consider claim 1. Palviainen teaches a method of forwarding packet calls in mobile communication system, comprising:

determining whether a called subscriber is a subscriber of a call-forwarding service and has set up a call-forwarding unconditional function in response to a packet call set-up request (C1, L43-67, C2, L1-5, C4, L22-44 teach implementing unconditional call forwarding wherein send second call forwarding as voice mail service which means as set up a call-forwarding unconditional function in response to a packet call set-up request); and

setting up a packet call directed to an IP address of the called subscriber for forwarding to a forward-to address based on a result of said determining step (C5, L61-67, C6, L1-2 teach the connection can be unconditional call forwarding with data transmission which means as forwarding call directed/forward to an IP address).

Consider **claim 12**. Palviainen teaches a method of forwarding packet calls in mobile communication system, comprising:

receiving routing information of a called subscriber according to a packet call set-up request (C4, L45-64, Fig.5; Illustrate No.35 HLR as receiving routing information of a called subscriber set-up request) and

paging a mobile handset of the called subscriber; wherein when no response is received from dais paging, determining whether the called subscriber subscribes to a call forwarding service and then either stopping a packet call set-up trial or setting up a packet call directed to an IP address of the called subscriber and forwarded to a forward-to address (C5, L61-67, C6, L1-2 teach unconditional call forwarding which means as paging a mobile handset wherein and data transmission/forwarding call directed/forward to an IP address).

2. Claims 21-23, 30-32 are rejected under 35 U.S.C. 102(e) as being anticipated Andersson et al. (Patent No. 6,693,894).

Consider claim 21, 30. Andersson teaches a method for processing calls in a mobile communications system, comprising:

receiving a call directed to an IP address of a mobile terminal subscriber (Abstract, L1-3, C1, L35-39 teach routing IP to mobile party subscriber which read on call directed to an IP address of a mobile terminal subscriber); and forwarding the call to a forwarding address of the mobile terminal subscriber (C1, L43-55, Fig.2 and Fig.3 Illustrate and described).

Consider **claims 22, 31**. Andersson teaches the method of claim 21, wherein the forwarding address is a different IP address of the mobile terminal subscriber (C6, L54-63, C7, L35-57, Fig.7, Illustrate as read on different IP address of the mobile terminal subscriber).

Consider **claims 23, 32**. Andersson teaches the method of claim 21, wherein the forwarding address is one of a predetermined URL address, a predetermined server address, or an address corresponding to another mobile terminal (C3, L64-67, C4, L1-28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 2-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Palviainen et al. (Patent No. 6,385,446) in view of Provost et al. (Patent No. 6,801,781).

Consider **claims 2, 13**. Palviainen teach the limitation of claim as discuss **but silent on** the method of claim 1, further comprising: registering the call forwarding service by adding a parameter having forwarding information to packet service

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subscriber data transmitted from an HLR to an SGSN when the HLR changes the subscriber information stored in a database of the SGSN.

In an analogous art, Provost teaches "Providing a supplementary service in a mobile communications system". Further, **Provost teaches** the method of claim 1, further comprising: registering the call forwarding service by adding a parameter having forwarding information to packet service subscriber data transmitted from an HLR to an SGSN when the HLR changes the subscriber information stored in a database of the SGSN (C4, L51-67, C5, L1-20, Fig.3, Illustrate as information subscriber data as forward No.212 to SGSN and the subscriber information stored in a database of the SGSN No.213).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Palviainen and Provost system, such that transmitted data/information from an HLR to an SGSN and information stored in a database of the SGSN to provide means for security of keeping record information of subscriber.

Consider **claim 3**. Palviainen teaches the method of claim 1, wherein the determining step is performed at an HLR that received a called subscriber routing information request (C4, L45-64, Fig.5, Illustrate No.35 as read on an HLR that received a called subscriber routing information request).

Consider **claim 4**. Provost teaches the method of claim 1, further comprising

when the called subscriber is determined to have subscribed to the call forwarding service and set up the call-forwarding unconditional function: transmitting from an HLR to a Gateway General Packet Radio Service (GPRS) Service Node (GGSN) first routing information for setting up the packet call directed to the IP address of the called subscriber and forwarded to the forward-to address (C3, L1-33, Fig.1, Illustrate and described).

Consider **claim 5**. Palviainen teaches the method of claim 4, wherein the first routing information includes forwarding information, in a case where the called subscriber subscribes to the call forwarding service (C3, L60-67, C4, L1-8).

Consider **claims 6-7, 16**. Palviainen teaches the method of claim 2, wherein the forwarding information includes forward-to IP address information (C5, L66-67, C6, L1-2 teach data transmission as read on IP address information).

Consider **claims 8-9, 17**. Palviainen teaches the method of claim 2, wherein the forwarding information includes at least one of a previously designated URL address, a certain server address and another mobile station address (C1, L35-65, C5, L66-67, C6, L1-2).

Consider **claims 10-11**. Palviainen teaches the method of claim 1, wherein the setting up step comprises: transmitting first routing information including forwarding information from a first HLR to a GGSN; determining a second HLR for setting up the

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packet call forwarded to another mobile station by checking forwarding information from the received first routing information; and setting up the packet call, forwarded to another mobile station registered by the called subscriber, according to second routing information received from the second HLR (C1, L35-67, C2, L1-25, C4, L7-44).

Consider **claims 12, 14**. Provost teaches the method of claim 12, wherein the determining step is performed at an SGSN which pages a mobile handset of the called subscriber (C3, L1-9, Fig.1, Illustrate and described).

Consider **claims 15, 19**. Provost teaches the method of claim 12, wherein when the called subscriber subscribes to the call forwarding service, an SGSN transmits to a GGSN information including forwarding information for setting up a packet call directed to an IP address of the called subscriber and forwarded to forward-to address (C3, L1-38).

Consider **claim 18**. Palviainen teaches the method of claim 15, wherein the information including forwarding information comprises information indicating that there is no response from the called subscriber, when the called subscriber is a subscriber of the call forwarding service (C5, L61-67, C6, L1-2 teach unconditional call forwarding which means forwarding information indicating that there is no response).

Consider **claim 20**. Provost teaches the method of claim 12, wherein the setting up step comprises:

transmitting information including forwarding information from an SGSN to a GGSN according to a result of the determining step; and

checking forwarding information from the received information including forwarding information (C3, L1-38); wherein

Palviainen teaches in a case where setting up a packet call forwarded to another mobile station is impossible as determined from a result of the checking step, setting up the forwarded packet call by routing the packet call using an internet network according to the received forwarding information (C4, L22-45, C5, L60-67, C6, L1-2).

4. **Claims 24-29, 33-38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson et al. (Patent No. 6,693,894) in view of Palviainen et al. (Patent No. 6,385,446)

Consider **claims 24, 28, 33, 37**. Andersson teaches the limitations of claim as discuss above **but silent on** the method of claim 21, wherein the forwarding step is performed unconditionally.

Palviainen teaches the method of claim 21, wherein the forwarding step is performed unconditionally (C1, L67, C2,L1-5).

Therefore, it would have been obvious at the time that the invention was made that person having ordinary skill in the art to modify Andersson and Palviainen system, such that the forwarding step is performed unconditionally to provide means for

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forwarding call to mobile terminal in any condition or status of communication, call will be forwarding.

Consider **claims 25, 34**. Palviainen teaches the method of claim 21, further comprising: sending a paging signal the mobile subscriber terminal, wherein the forwarding step is performed only when no response is received from the paging signal (C5, L61-67, C6, L1-2 teach unconditional call forwarding which means forwarding information when there is no response).

Consider **claims 26, 35**. Palviainen teaches the method of claim 21, further comprising: determining whether the mobile terminal subscriber is a subscriber of a call-forwarding service, wherein the forwarding step is performed based on a result of the determining step (C3, L60-67, C4, L1-7).

Consider **claims 27, 36**. Palviainen teaches the method of claim 26, further comprising: determining a type of call-forwarding service of the mobile terminal subscriber; and forwarding the call based on the type of call-forwarding service (C2, L6-25, L50-65).

Consider **claims 29, 38**. Palviainen teaches the method of claim 28, wherein the type of call-forwarding service is one where calls are forwarded to the forwarding address after no response has been received from a paging signal for a predetermined

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period of time (C4, L22-41).

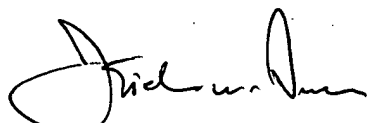
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kiet Doan whose telephone number is 571-272-7863.

The examiner can normally be reached on 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Kiet Doan
Patent Examiner



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